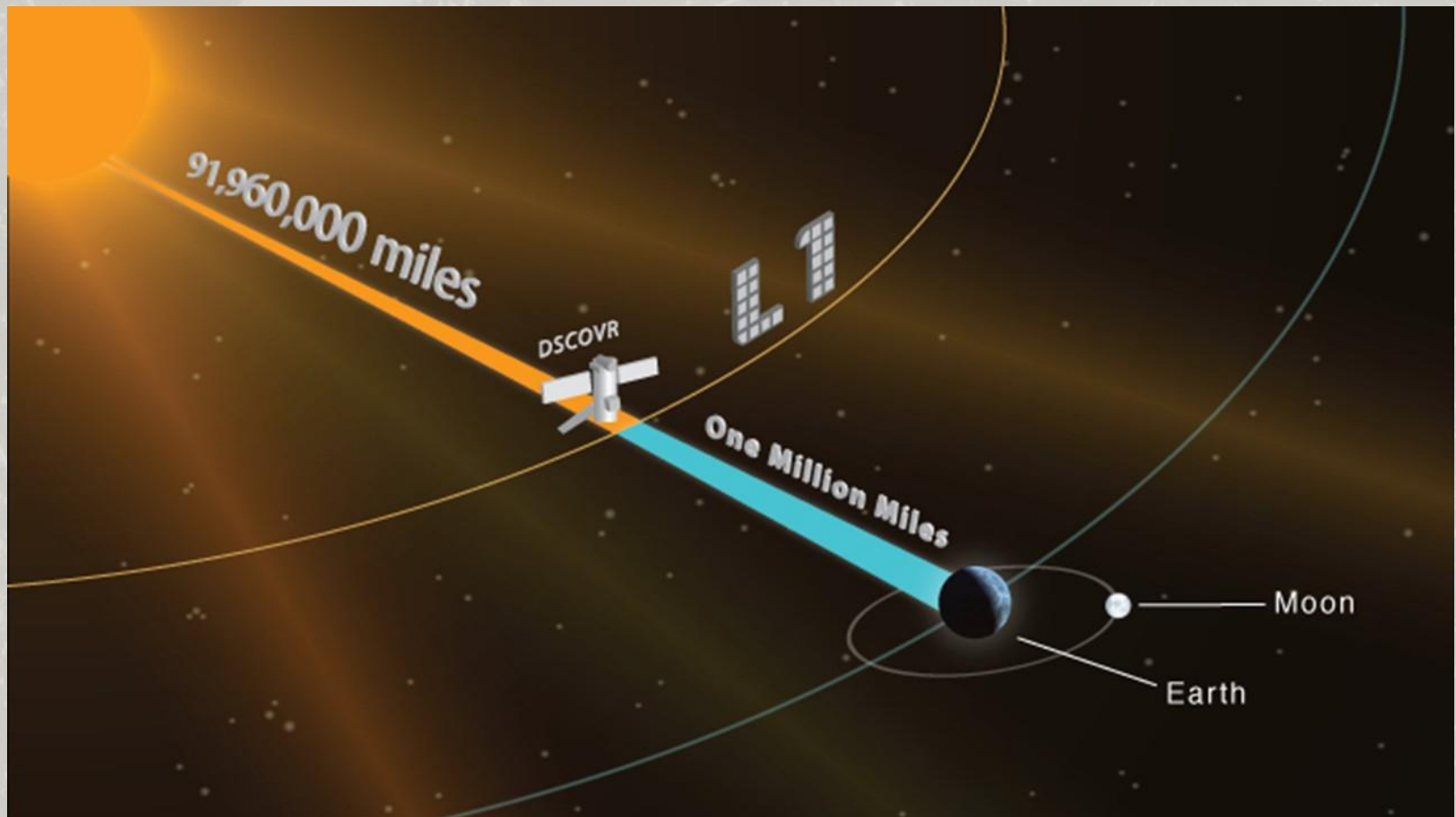


The background features a complex, abstract design. A prominent, thick, light-gray spiral curve winds from the bottom left towards the upper right. Overlaid on this and the entire background are numerous thin, white, curved lines that resemble particle tracks or data paths, some ending in small arrowheads. The overall aesthetic is scientific and dynamic, with a light gray base color.

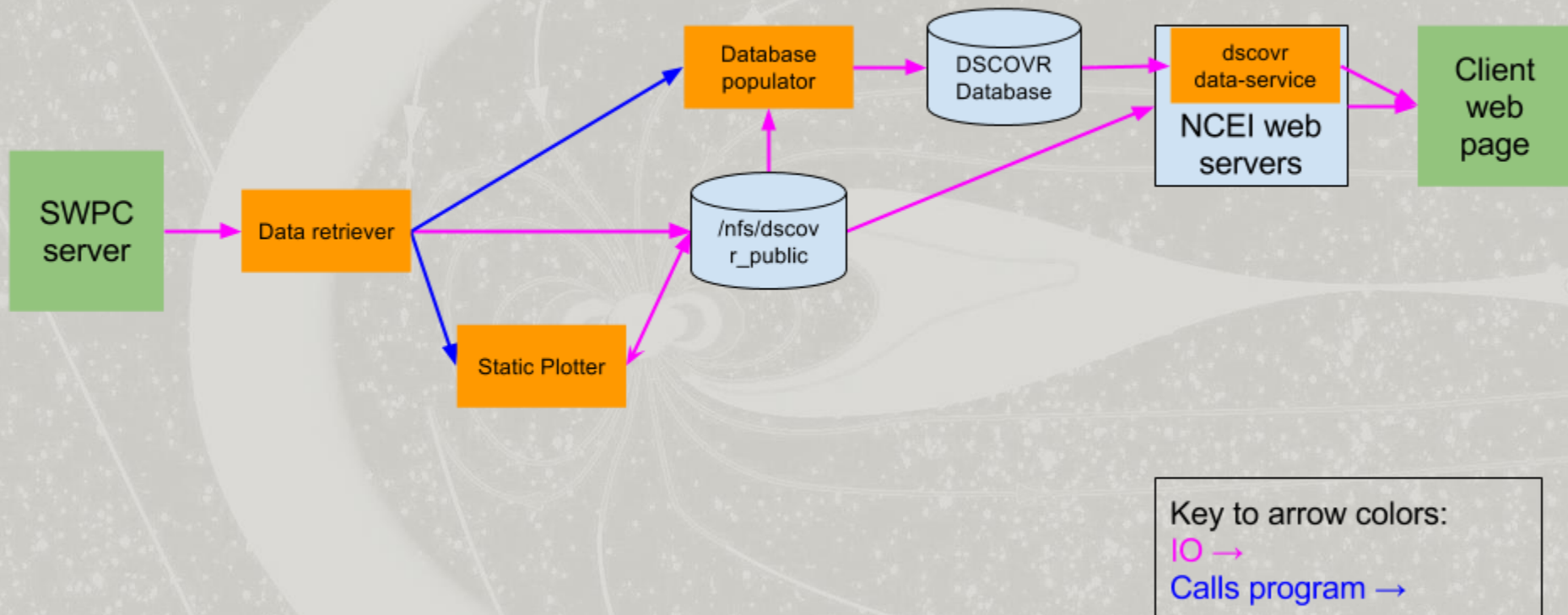
Implementation of Interactive Visualization for DSCOVER

William Rowland, Stefan Codrescu,
Margaret Tilton
CU/CIRES, NOAA/NCEI

Deep Space Climate Observatory (DSCOVR)

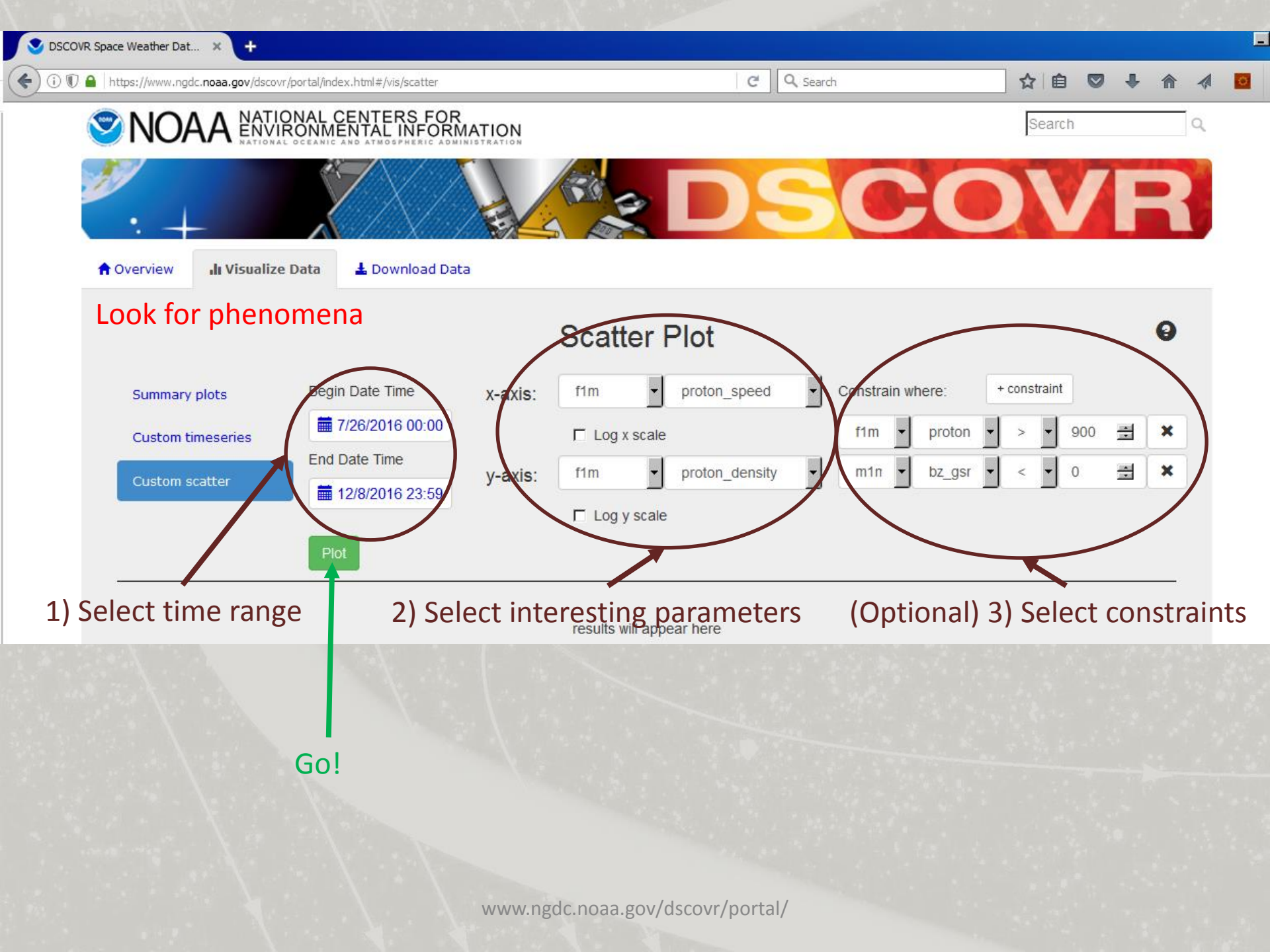


Overview



Database

- Creates table schema based on file
 - One table per product type
 - New data types or changes to data are very easy to address
- Fields can be blacklisted/whitelisted
- Backbone for queries from Rest API
 - Rest API automatically recognizes new DSCOVER tables.



Scatter Plot



Summary plots

Custom timeseries

Custom scatter

Begin Date Time

7/26/2016 00:00

End Date Time

12/8/2016 23:59

Plot

x-axis:

f1m

proton_speed

Constrain where:

+ constraint

☐ Log x scale

y-axis:

f1m

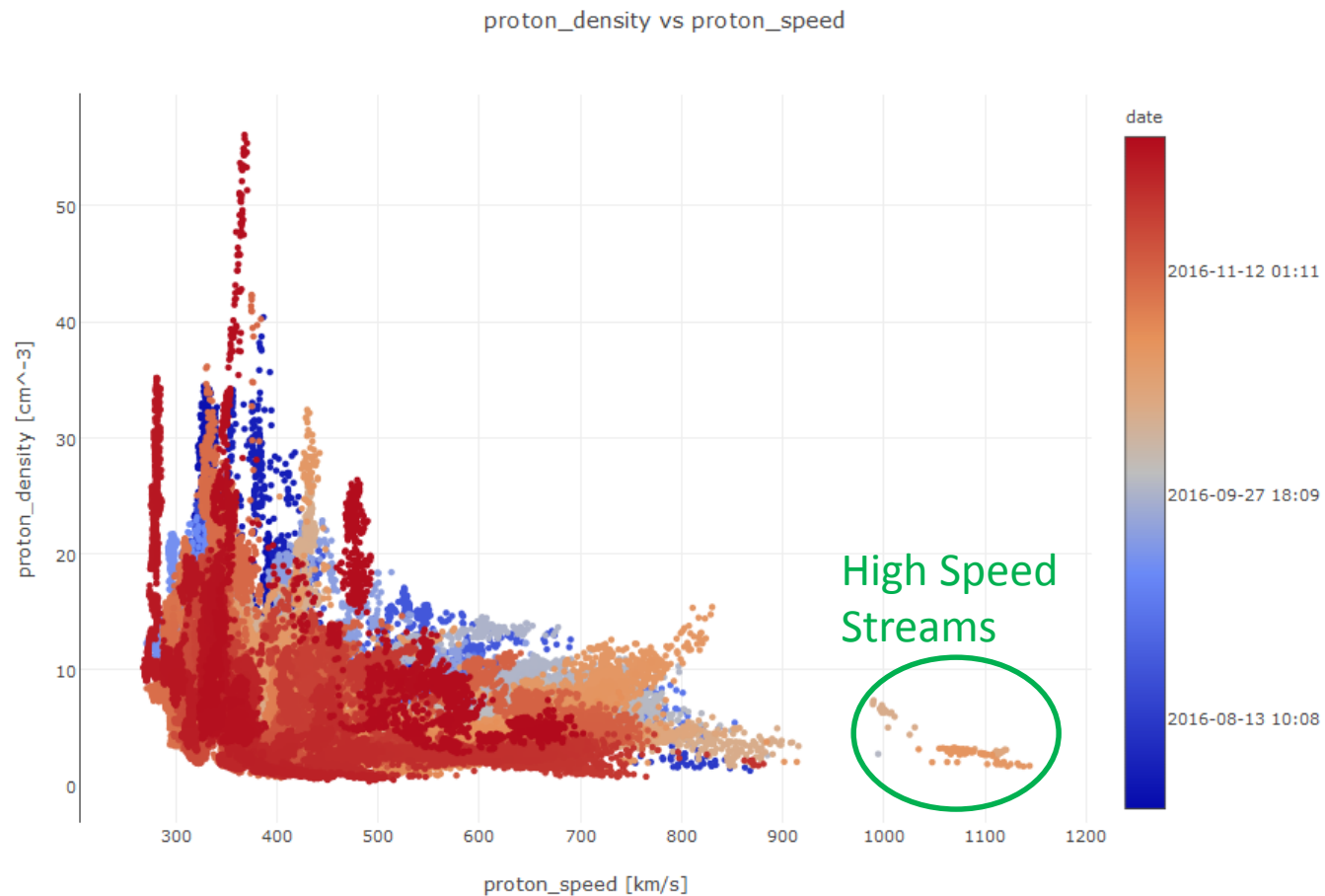
proton_density

☐ Log y scale

Status

plot will appear below

Select any 1min data



Scatter Plot

[Summary plots](#)[Custom timeseries](#)[Custom scatter](#)

Begin Date Time

7/26/2016 00:00

End Date Time

12/8/2016 23:59

[Plot](#)

x-axis:

f1m

proton_speed

☐ Log x scale

y-axis:

f1m

proton_density

☐ Log y scale

Status

plot will appear below

Constrain where:

[+ constraint](#)

f1r

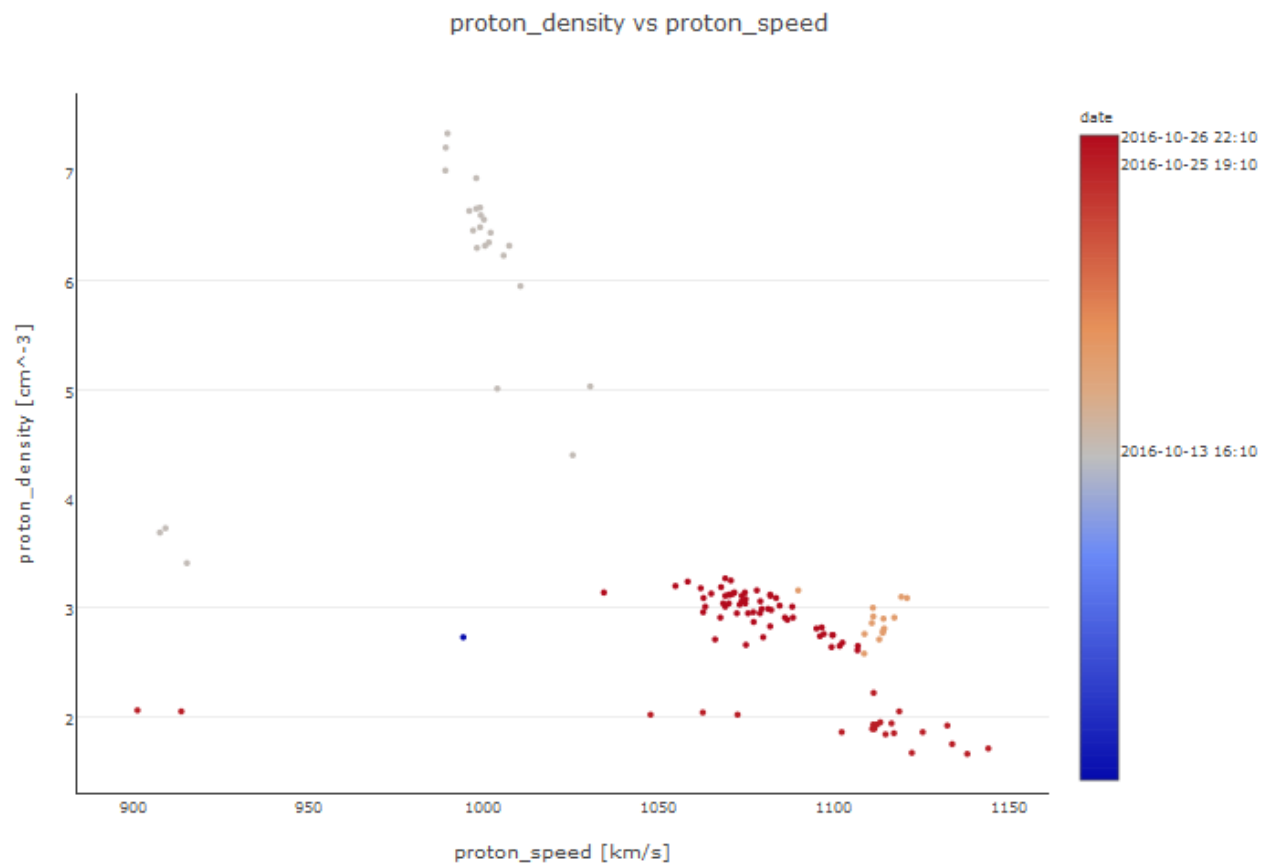
protc

>

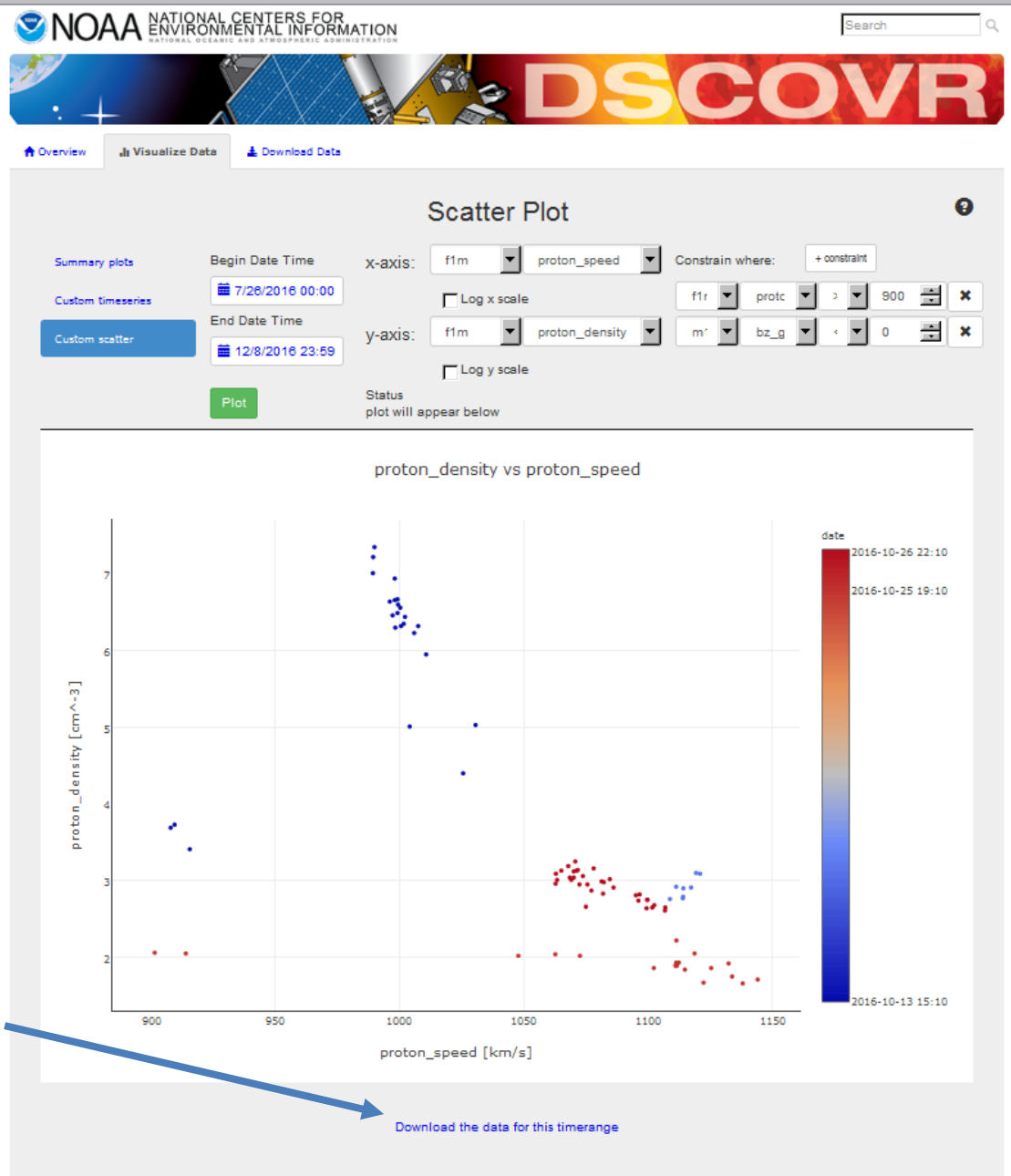
900

[×](#)

Screen out irrelevant data



Share current view with collaborators



Data can be downloaded any time.



[Overview](#)

[Visualize Data](#)

[Download Data](#)


Time Series Plot

Summary plots

Custom timeseries

Custom scatter

Begin Date Time

 11/29/2016 00:00

End Date Time

 12/8/2016 23:59

Panel 1

x

Constrain where:

+ constraint

m1m	bt	x
m1m	bx_gsm	x
m1m	by_gsm	x
m1m	bz_gsm	x

☐ Log scale

+ variable

Panel 2

x

f1m	proton_speed
-----	--------------

☐ Log scale

+ variable

Panel 3

x

f1m	proton_density
-----	----------------

☐ Log scale

+ variable

+ panel

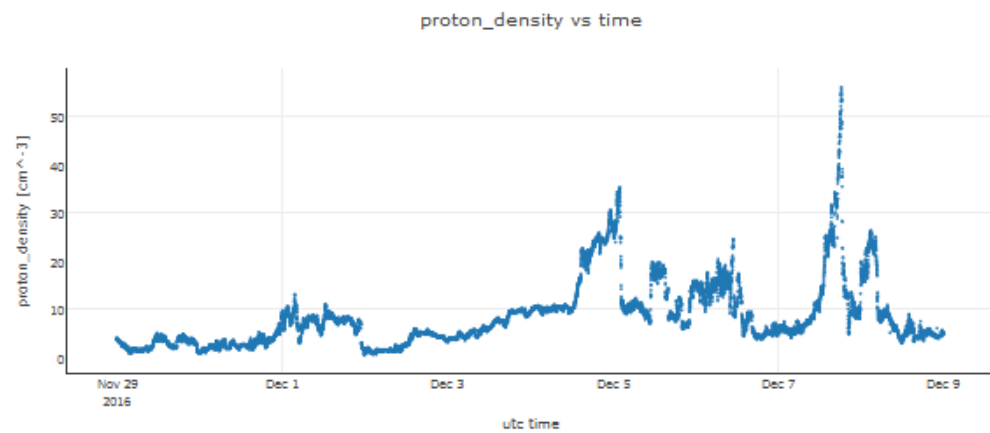
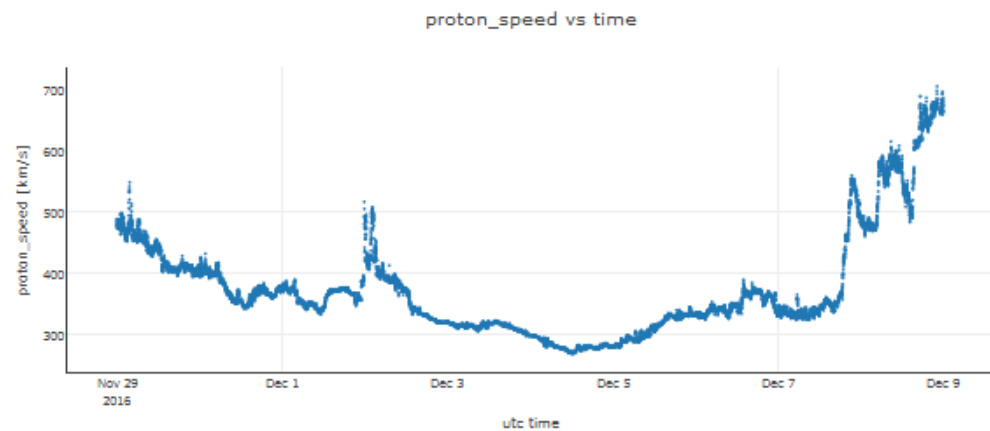
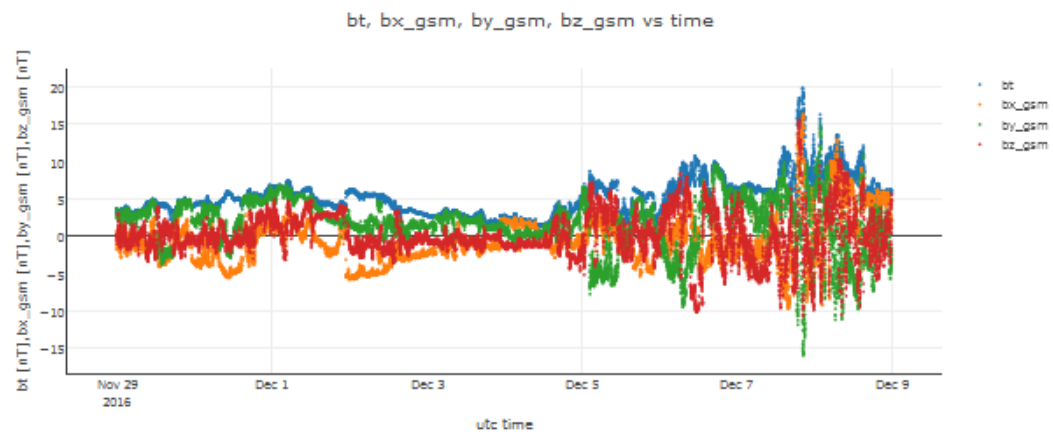
Plot

Status

panel 3: plot will appear below

bt, bx_gsm, by_gsm, bz_gsm vs time

Make custom time series, same UI.



URLs

- NCEI (Retrospective) Portal link:
 - www.ngdc.noaa.gov/dscover/portal/